Listing of Claims

The following listing of claims supersedes all previous listings of claims.

Claims 1-141. (Canceled)

142. (Currently amended) A method of removing dental plaque in mammals comprising the step of contacting the dental plaque with an ~~dental plaque removing~~ effective amount of a hydrolytic enzyme composition comprising a mixture of enzymes isolated from Antarctic krill.

143. (Previously presented) The method of claim 142, wherein the enzyme composition has endo-peptidase and exo-peptidase activities.

144. (Previously presented) The method of claim 142, wherein the enzyme composition has at least two endo-peptidase activities and an exo-peptidase activity.

145. (Previously presented) The method of claim 142, wherein the enzyme composition comprises enzymes having molecular weights between about 24 kd and about 34 kd as determined by SDS PAGE.

146. (Previously presented) The method of claim 144, wherein the enzyme composition has at least three proteolytic activities selected from the group consisting of chymotrypsin activity, trypsin activity, collagenase activity and elastase activity.

147. (Previously presented) The method of claim 144, wherein the enzyme composition has each of chymotrypsin activity, trypsin activity, collagenase activity and elastase activity.

148. (Previously presented) The method of claim 142, wherein the mixture of enzymes is isolated from krill of a genus selected from Euphausia and Thysanoessa.

149. (Previously presented) The method of claim 142, wherein the enzyme composition has a purity of at least about 95% with respect to macromolecules.

150. (Previously presented) The method of claim 142, wherein the enzyme composition comprises enzymes having a molecular weight between about 20 kd and about 40 kd, as determined by SDS PAGE.

151. (Previously presented) The method of claim 142, wherein the enzyme composition comprises a multifunctional enzyme.

152. (Previously presented) The method of claim 151, wherein the multifunctional enzyme has at least one of a chymotrypsin, trypsin, collagenase, elastase or exo-peptidase activity.

153. (Previously presented) The method of claim 152, wherein the multifunctional enzyme has at least two activities selected from the group consisting of chymotrypsin, activity, trypsin activity, collagenase activity, elastase activity and exo-peptidase activity.

Claims 154-156. (Canceled)

157. (Previously presented) The method of claim 142, wherein the enzyme composition comprises an enzyme which has an N-terminal sequence comprising IVGGM/NEVTPHAYPWQVGLFIDDMYF (SEQ ID NO: 17).

158. (Previously presented) The method of claim 152, wherein the multifunctional enzyme has a molecular weight between about 26 kd and about 32 kd as determined by SDS PAGE.

159. (Currently Amended) A method of removing dental plaque in a mammal comprising: contacting the dental plaque with an ~~dental plaque removing~~ effective amount of a poly-enzyme composition comprising enzymes isolated from Antarctic krill, and wherein said poly-enzyme composition comprises at least six proteins.

160. (Previously presented) The method of claim 159, wherein the enzyme composition has endo- and exo-peptidase activities.

161. (Previously presented) The method of claim 159, wherein the enzyme composition comprises enzymes having molecular weights between about 24 kd and about 34 kd as determined by SDS PAGE.

162. (Previously presented) The method of claim 142, wherein the enzyme composition comprises a pharmaceutically acceptable topical carrier.

163. (Previously presented) The method of claim 142, wherein the enzyme composition comprises a pharmaceutically acceptable carrier.

164. (Previously presented) The method of claim 142, where the enzymes are isolated from Antarctic krill of the genus Euphausia.